

What is claimed is:

Sub A4

1. A method of delivering resources used in a system where there are a plurality of relay devices between a delivering source device which delivers resources and a terminal device which receives the resources, comprising:
 - 5 notifying from the terminal device to the delivering source device of information specifying resources to be delivered and a relay device for receiving the resources;
 - 10 delivering the resources specified by the notification from the delivering source device to the relay device specified by the notification; and
 - 15 delivering the resources from the relay device to the terminal device according to an access from the terminal device.
2. A method of delivering resources used in a system where there are a plurality of relay devices between a delivering source device which delivers resources and a terminal device which receives the resources, comprising:
 - 20 notifying from the terminal device to the delivering source device of information specifying a

relay device for receiving resources from the delivering source device;

delivering resources from the delivering source device to the relay device specified by the 5 notification; and

delivering the resources from the relay device to the terminal device according to an access from the terminal device.

10 3. A method of delivering resources used in a system where there are a plurality of relay devices between a delivering source device which delivers resources and a terminal device which receives the resources, comprising:

15 notifying from the terminal device to the delivering source device of information specifying first and second relay devices for receiving resources from the delivering source device;

delivering resources from the delivering source 20 device to the first and the second relay devices; and

delivering the resources from the first or second relay device to the terminal device according to an access from the terminal device.

25 4. The method according to claim 3, wherein:

when the resources are delivered from the first relay device to the terminal device according to the access from the terminal device,

the resources are deleted from the first
5 relay device;

the first relay device transmits a delivery completion notification to the second relay device; and

the resources are deleted from the second relay
10 device, when the second relay system receives the delivery completion notification.,

5. A method of delivering resources used in a system where there are a plurality of relay devices
15 between a delivering source device which delivers resources and a terminal device which receives the resources, comprising:

notifying from a first terminal device to the delivering source device of information specifying a
20 relay device for receiving resources from the delivering source device;

delivering resources from the delivering source device to the relay device specified by the notification;

delivering the resources from the relay device
25 to the first terminal device according to an access from

the first terminal device; and
delivering the resources from the relay device to a
second terminal device according to an access from
the second terminal device.

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6. The method according to claim 5, wherein
the delivering source device does not
deliver resources to the relay device when a notification
of the same contents is received.

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7. A method of delivering resources used in a
system where there are a plurality of relay devices
between a delivering source device which delivers
resources and a terminal device which receives the
15 resources, comprising:

notifying from the terminal device to the
delivering source device of information specifying a
relay device for receiving resources from
the delivering source device;

20 delivering resources from the delivering source
device to the terminal device;

delivering resources from the delivering source
device to the relay device specified by the notification,
when the delivering source device fails to deliver the
25 resources to the terminal device; and

50 55 60 65 70 75 80 85 90 95

delivering the resources from the relay device to the terminal device according to an access from the terminal device.

5 8. A method of delivering resources used in a system where there are a plurality of relay devices between a delivering source device which delivers resources and a terminal device which receives the resources, comprising:

10 notifying from the terminal device to the delivering source device of information specifying first and second relay devices for receiving resources from the delivering source device;

15 delivering resources from the delivering source device to the first relay device;

delivering resources from the delivering source device to the second relay device, when the delivering source device fails to deliver the resources to the first relay device; and

20 delivering the resources from the first or second relay device to the terminal device according to an access from the terminal device.

25 9. A method of delivering resources used in a system where there are a plurality of relay devices

between a delivering source device which delivers resources and a terminal device which receives the resources, comprising:

setting same destination information specifying 5 a plurality of terminal devices in a plurality of relay devices;

supplying resources provided from the delivering source device to the plurality of relay devices;

10 the terminal device receiving the resources from any relay device among the plurality of relay devices; and

the plurality of relay devices notifying that the resources have been delivered to the terminal device 15 each other, and discarding the resources when the resources are delivered to all of the plurality of terminal devices specified by the destination information.

20 10. A method of delivering resources used in a system where there is a relay device between a delivering source device which delivers resources and a terminal device which receives the resources, comprising:

25 notifying from a first terminal device to the relay

device of information specifying resources to be delivered;

5 said relay device accessing a delivering source device which provides the specified resources, and obtaining the resources;

 delivering the resources from the relay device to the first terminal device according to an access from the first terminal device; and

10 said relay device delivering the resources to a second terminal device without accessing the delivering source device when the information specifying the same resources obtained from the second terminal device.

15 11. A method of delivering resources used in a system where there are a plurality of relay devices between a delivering source device which delivers resources and a terminal device which receives the resources, comprising:

20 notifying from the terminal device to a first relay device of information specifying resources to be delivered;

25 the first relay device accessing a delivering source device which provides the specified resources, and obtaining the resources;

delivering the resources from the first relay device to a second relay device; and

delivering the resources from the first or second relay device to the terminal device according to an 5 access from the terminal device.

12. The method according to claims 1, wherein a logical identifier is used as information identifying the terminal device.

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13. A method of delivering resources used in a system where there are a plurality of relay devices between a delivering source device which delivers resources and a terminal device which receives the 15 resources, and where the resources are delivered from the delivering source device to the terminal device through a relay device, wherein

one of a first method in which resources are delivered from the delivering source system to all 20 relay devices, a second method in which resources are delivered only to a relay device specified by the mobile terminal device, and a third method in which resources are delivered to a relay device which receives information for specification of resources 25 from the terminal device is selected and executed.

14. A resource delivering apparatus which delivers resources at a request from a terminal device, comprising:

5 an analysis unit receiving information from the terminal device and analyzing it, the information specifying a relay device which can be accessed by the terminal device; and

10 a delivering unit delivering resources to a relay device specified by the information based on the analysis result obtained by said analysis unit.

15. A relay device in a plurality of relay devices in a system where the plurality of relay devices exist between a delivering source device which delivers resources and a terminal device which receives the resources, comprising:

20 a reception unit receiving information specifying resources to be delivered from the terminal device;

25 an obtaining unit accessing a delivering source device which provides resources specified by the information, and obtaining the resources;

30 a first delivering unit delivering the resources to another relay device; and

a second delivering unit delivering the resources to the terminal device according to an access from the terminal device.

5 16. A computer-readable storage medium storing a program to be executed by a computer used in a system where there are a plurality of relay devices between a delivering source device which delivers resources and a terminal device which receives the 10 resources, comprising:

a first program code receiving information from the terminal device and analyzing it, the information specifying a relay device which can be accessed by the terminal device; and

15 a second program code delivering resources to a relay device specified by the information.

17. A computer-readable storage medium storing a program to be executed by a computer used in a system 20 where there are a plurality of relay devices between a delivering source device which delivers resources and a terminal device which receives the resources, comprising:

a first program code receiving information 25 specifying resources to be delivered from the terminal

device;

a second program code accessing a delivering source device which provides resources specified by the information, and obtaining the resources;

5 a third program code delivering the resources to another relay device; and

a fourth program code delivering the resources to the terminal device according to an access from the terminal device.

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